# Fall 2015 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

## Sacramento River Basin

RD1660	Overall LMA	Total LMA						
Reclamation District No. 1660 Tisdale	Rating	Miles						
	A	12.04						
Rated Item		Maintena	nce Deficiancy		Enforcement		Design & System Obsolescence	
Rateu Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Encroachments	0.01		0.01	0.08%	0.64			
Animal Control	0.01		0.01	0.08%				
Slope Stability	0.05		0.05	0.42%				
Supplemental								
2015 USACE Erosion Survey, DRAFT	0.03		0.03	0.25%				
DWR UCIP Field Study					0.04			
LMA Totals:	0.10	0.00	0.10	0.83%	0.68	0.00	0.00	0.00
Unit No. 01 Sacramento River LB	Overall Unit	Total Unit						
	Rating	Miles						
RD1660	Α	2.94						
D	Maintenance Deficiancy		Enforcement		Design & System Obsolescence			
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles		U Miles
Earthen Levee								
Encroachments	0.01		0.01	0.34%	0.64			
Animal Control	0.01		0.01	0.34%				
Slope Stability	0.05		0.05	1.70%				
Supplemental								
2015 USACE Erosion Survey, DRAFT	0.03		0.03	1.02%				
DWR UCIP Field Study					0.03			
Unit Totals:	0.10	0.00	0.10	3.40%	0.67	0.00	0.00	0.00
Unit No. 02 Sutter Bypass RB	Overall Unit Rating	Total Unit Miles						
RD1660	Α	9.10						
Rated Item		Maintena	nce Deficiancy		Enforc	ement	Design 8 Obsole	
Nateu item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Supplemental								
DWR UCIP Field Study					0.01			
Unit Totals:	0.00	0.00	0.00	0.00%	0.01	0.00	0.00	0.00

# **LMA District Cover Sheet**

## Fall 2015 Levee Inspection Results

# **Reclamation District No. 1660 Tisdale**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)						
* Overall LMA Rating (Fall Only)	* Overall LMA Rating (Fall Only)									
	** Non-receipt of Su	ımmer or Winter Inspe	ection Reports may effec	ct overall annual rating.						
* SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.  FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.										
Comments										

### **Unit Cover Sheet**

### Fall 2015 Levee Inspection Results

## **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles
Unit No. 01 Sacramento River	Left	2.94

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	03/16/2015 - 03/16/2015		11/02/2015 - 11/02/2015	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Andy Duffey		Andy Duffey	

#### **Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

## http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Fall 2015

## **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	2.94	11/02/2015 11/02/2015	Bob Duffey

LM Start		Rating **	Α	Issue No.		14		
LM End		Issue Type +	Ma	Location *	* LS			
Category	GPS La	atituc	le/Longitude					
Category			Start		End	d		
Item		perations & Maintenance			0		٥	
пеш	Manuals				0		0	
DWR ID	DWR_RD1	660_01_s _ 201	3_14					
		Action/	Comme	nts				
Inspector (	Comments	: The LMA ha	s the O	&M manuals	S.			

No Photos

LM Start		Rating **	Α	Issue No. 15			
LM End		Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS La	atitud	le/Longitude	
Calegory			Start		End		
Item		Emergency Supplies &			0		0
пеш	Equipmen	nt			0		0
DWR ID DWR_RD1660_01_s _ 2013_15							
	Action/Comments						

No Photos

Inspector Comments: The LMA has adequate emergency supplies and equipment.

LM Start		Rating **	Α	Issue No.		16	
LM End		Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS L	atitud	le/Longitude	
Calegory				Start		End	
Item	Flood Pre	paredness &	Training		0		0
item					0		0
DWR ID	DWR_RD1	660_01_s _ 20 <sup>2</sup>	13_16				
		Action/	Comme	nts			

No Photos

Inspector Comments: The LMA has completed flood fight training in 2014.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

## Levee Inspection Report By Mile - Fall 2015

## **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	2.94	11/02/2015 11/02/2015	Bob Duffey

LM Start	0.05	Rating **	М	Issue No.		12	
LM End	0.05	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory			Start		End		
Item	Encroachi	ments		39.0626	43 °	39.062643 °	
пеш				-121.8378	57°	-121.837857 °	
DWR ID	DWR_RD1	660_01_s _ 201	2_12				
		Action/	Comme	nts			
Building							



View of the building and fence at the landside toe.

LM Start	0.14	Rating **	M	Issue No.	20		
LM End	0.14	Issue Type +	En	Location *		LS	
Category	Suppleme	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.0613	22 °	39.061322	0
item				-121.8379	93 °	-121.837993	0
DWR ID							

#### Action/Comments

Inspector Comments: FS\_ID:46670

DS ID:22489 EP\_NO: N/A FS\_HLM: 0.142

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - needs proper abandonment.- opening of landside pipe almost burried.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch pipe thru levee, 16.4 FBC. Slide gate in concrete well at toe of WW slope. (IV A-Winship). USACE bench mark on top of headwall at LS toe. O&M Manual SAC 133, August 1955.

FS Date: 10/10/2013



WS view: closer view of two slide gates in concrete box on levee slope.

## Levee Inspection Report By Mile - Fall 2015

## **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	2.94	11/02/2015 11/02/2015	Bob Duffey

LM Start	0.14	Rating **	М	Issue No.	20 (cont)	
LM End	0.14	Issue Type +	En	Location *	LS	
Catagony	Suppleme	ental		GPS La	titud	e/Longitude
Category				Start		End
Itom	DWR UCI	IP Field Study		39.06132	2°	39.061322
Item				-121.83799	3 °	-121.837993
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:46670

DS\_ID:22489 EP\_NO: N/A FS\_HLM: 0.142

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - needs proper abandonment.- opening of landside

pipe almost burried.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch pipe thru levee, 16.4 FBC. Slide gate in concrete well at toe of WW slope. (IV A-Winship). USACE bench mark on top of headwall at LS toe. O&M Manual SAC 133, August 1955. FS Date: 10/10/2013

LM Start	0.14	Rating **	М	Issue No.	20 (cont)
LM End	0.14	Issue Type +	En	Location *	LS



WS view: two slide gates in concrete box on levee slope.

Photo 3 of 3: UCIP\_FA\_2015\_2481.jpg



WS view: concrete box on levee slope. No pipe found on berm and river bank.

## Levee Inspection Report By Mile - Fall 2015

## **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	2.94	11/02/2015 11/02/2015	Bob Duffey

LM Start	0.42	Rating **	Α	Issue No.		18		
LM End	0.42	Issue Type +	Ma	Location *	LS			
Catagony	Earthen L	GPS Latitude/Longitude						
Category				Start		End		
Itom	Vegetatio	n		39.05727	75 °	39.057275°		
Item				-121.83869	95 °	-121.838695 °		
DWR ID	DWR_RD1660_01_f _ 2015_18							
	Action/Comments							

Control annual grass and weeds on the levee slopes and easements. Inspector Comments: The Reclamation District burns and drags both slopes.

### Photo 1 of 1: FA\_2015\_RD1660\_8\_18\_20151118\_00011.jpg



View of the levee with no vegetation on both slopes.

LM Start	1.10	Rating **	М	Issue No.		9	
LM End	1.40	Issue Type +	En	Location *		LS	
Category	Earthen L		GPS Latitude/Longitude				
Calegory				Start		End	
Item	Encroachments			39.047610 °		39.043622 °	
item				-121.8388	02 °	-121.836445 °	
DWR ID	DWR_RD1	660_01_s _ 201	12_9				
Action/Comments							
Ditch							

## Photo 1 of 1 : FA\_2015\_RD1660\_8\_9\_20150910\_00004.jpg



View of the ag ditch along the L/S toe.

LM Start	1.33	Rating **	М	Issue No.	8			
LM End	1.36	Issue Type +	Ma	Location *	WS			
Category	Suppleme	ental		GPS La	titud	le/Longitude		
				Start		End		
Item	2015 USACE Erosion Survey,			39.04436	61 °	39.043916 °		
пеш	DRAFT			-121.83765	64 °	-121.837305 °		
DWR ID								
	Action/Comments							

Inspector Comments: 2009 - Erosion on levee toe where an old cobble site is failing. 2011 - Some new minor erosion. 2012 - Site extended downstream, bank is being impacted from the weight of the trees. 2013 - Minor new erosion at the toe. 2015: Minor new erosion at the toe. [2015 Site ID: SAC\_120-6\_L]



USACE 2013 Photo #1

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2015

### **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	2.94	11/02/2015 11/02/2015	Bob Duffey

LM Start	1.53	Rating **	М	Issue No.		21
LM End	1.53	Issue Type +	En	Location *		WS
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Itom	DWR UCI	IP Field Study		39.04230	)4 °	39.042304 °
Item				-121.83478	33 °	-121.834783 °
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:22543

DS\_ID:22484 EP\_NO: 16476 FS\_HLM: 1.561

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - 16-inch old steel pipe abandoned. Abandoned pipe found on landside levee toe.- abandoned power pole on waterside.- mobile diesel pump on channel bank.- attached tin pipes exposed on levee surface.

FIELD\_STRUCT\_DESC: 14-inch steel pipe through the levee crown, the placement of two 12-inch diameter tin pipes on the surface of the levee slopes attached to the existing 14-inch steel pipe. The pipe discharges into irrigation ditch on landside. An air vent on landside shoulder. (App. No. 16476 - Ettl, 1997).

FS Date: 10/10/2013

LM Start	1.53	Rating **	М	Issue No.	21 (cont)
LM End	1.53	Issue Type +	En	Location *	WS



WS view: two exposed tin pipes joined together and connected to 14inch steel pipe on levee slope.



WS view: two exposed 12" tin pipes on levee slope.

## Levee Inspection Report By Mile - Fall 2015

## **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	2.94	11/02/2015 11/02/2015	Bob Duffey

LM Start	1.53	Rating **	М	Issue No.		21 (cont)	
LM End	1.53	Issue Type + En		Location *		WS	
Category	Suppleme	ental		GPS La	titud	le/Longitude	
Calegory				Start		End	
Itom	DWR UCI	P Field Study		39.04230	)4 °	39.042304	0
Item				-121.83478	33 °	-121.834783	0
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:22543

DS\_ID:22484 EP\_NO: 16476 FS\_HLM: 1.561

Repair Type: Non-Urgent Crossing Status: Found



WS view: two exposed 12" tin pipes on levee slope. These pipes connected to the pump on river bank.

LM Start	1.64	Rating **	С	Issue No.		17
LM End	1.64	Issue Type +	En	Location *		LS
Category	evee	GPS La	titud	le/Longitude		
Calegory	llegory					End
Item	Encroach	ments		39.0413 <sup>-</sup>	10°	39.041310 °
iteiii				-121.83323	30°	-121.833230 °
DWR ID DWR_RD1660_01_f _ 2015_17						
		Action/	Comme	nts		

Tree or limb

Inspector Comments: The tree was removed from the landside slope.

No Photos

LM Start	2.01	Rating **	М	Issue No.		1	
LM End	2.34	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atituc	le/Longitude	
Calegory	Category			Start		End	
Item	Encroach	Encroachments			40°	39.034416 °	
item				-121.82842	21 °	-121.825698 °	
DWR ID	DWR_RD1	660_01_s _ 201	12_1				
		Action/	Comme	nts			
Ditch							



View of the large ditch along the landside toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2015

## **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	2.94	11/02/2015 11/02/2015	Bob Duffey

LM Start	2.16	Rating **	М	Issue No.		19	
LM End	2.16	Issue Type +	Ма	Location *		LS	
Category	evee	GPS Latitude/Longitude					
Calegory	Category				Start		
Item	Animal Co	ontrol		39.035420 ° 39.0		39.035420	٥
item				-121.8285	30°	-121.828530	٥
DWR ID DWR_RD1660_01_f _ 2014_19							
	Action/Comments						

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.
Inspector Comments: Repair the rodent holes on the landside slope.



View of the rodent holes and bait station.

LM Start	2.37	Rating **	М	Issue No.		2	
LM End	2.37	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End	
Item	Slope Sta	bility	ility			39.034107 °	
пеш				-121.8251	52 °	-121.825152 °	
DWR ID	DWR_RD1660_01_s _ 2012_2						

Action/Comments

Repair slope instability.

N	$\sim$	DI	h	tos

LM Start	2.39	Rating **	М	Issue No.		4	
LM End	2.39	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	titud	e/Longitude	
Category				Start		End	
Item	Slope Sta	bility		39.0338	58°	39.033858	٥
пеш				-121.8249	85 °	-121.824985	٥
DWR ID	DWR_RD1	660_01_s _ 20 <sup>2</sup>	12_4				
		Action/	'Commei	nts			

Repair slope instability.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2015

## **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	2.94	11/02/2015 11/02/2015	Bob Duffey

LM Start	2.58	Rating **	М	Issue No.		3	
LM End	2.58	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroachi	ments		39.0314	05 °	39.031405 °	
пеш				-121.823403 °		° -121.823403	
DWR ID	DWR_RD1	660_01_s _ 201	12_3				
		Action/	Comme	nts			
Equipment	t						



View of equipment along the landside slope.

LM Start	2.62	Rating **	М	Issue No.		22
LM End	2.62	Issue Type +	En	Location *		LS
Category	Suppleme	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P Field Study		39.0309	35 °	39.030935
item				-121.8230	22 °	-121.823022
DWR ID						

#### Action/Comments

Inspector Comments: FS\_ID:22632

DS ID:22492 EP\_NO: 10012 FS\_HLM: 2.671

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - abandoned pumphouse on landside toe. Needs confirmation from LMA or DWR Inspector about abandonment of pumphouse.- headwall on channel bank.

FIELD\_STRUCT\_DESC: 24-inch steel pipe through levee, 24 feet below crown. Slide gate on waterward shoulder. Abandoned pumphouse at landward slope. (ABO No. 10012-Harris)

FS Date: 10/10/2013



WS view: gate valve handle (center) on levee slope.

## Levee Inspection Report By Mile - Fall 2015

## **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	2.94	11/02/2015 11/02/2015	Bob Duffey

LM Start	2.62	Rating **	М	Issue No.		22 (cont)
LM End	2.62	Issue Type +	En	Location *		LS
Category	GPS La	titud	e/Longitude			
Calegory				Start		End
Item	DWR UCI	P Field Study		39.03093	35 °	39.030935
пеш					22 °	-121.823022
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:22632

DS\_ID:22492 EP\_NO: 10012 FS\_HLM: 2.671

Repair Type: Non-Urgent Crossing Status: Found

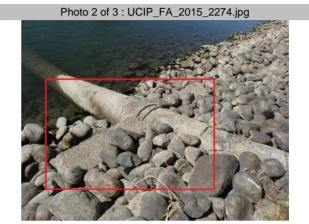
UCIP Comments: - abandoned pumphouse on landside toe. Needs confirmation from LMA or DWR Inspector about abandonment of

pumphouse.- headwall on channel bank.

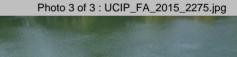
FIELD\_STRUCT\_DESC: 24-inch steel pipe through levee, 24 feet below crown. Slide gate on waterward shoulder. Abandoned pumphouse at landward slope. (ABO No. 10012-Harris)

FS Date: 10/10/2013

LM Start	2.62	Rating **	М	Issue No.	22 (cont)
LM End	2.62	Issue Type +	En	Location *	LS



WS view: closer view of inlet steel pipe immerged into channel water. Pipe was supported by concrete headwall.





WS view: inlet steel pipe (right) immerged into channel water.

## Levee Inspection Report By Mile - Fall 2015

# **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	2.94	11/02/2015 11/02/2015	Bob Duffey

LM Start	2.63	Rating **	М	Issue No.		5
LM End	2.66	Issue Type +	Ма	Location *		LS
Earthen Levee				GPS La	titud	e/Longitude
Category				Start		End
Item	Slope Sta	bility		39.0308	91 °	39.030436
item				-121.8229	56 °	-121.822617 °
DWR ID	DWR_RD1	660_01_s _ 201	2_5			
		Action/	Comme	nts		
Repair slop	oe instabili	ty.				

No Photos

### **Unit Cover Sheet**

### Fall 2015 Levee Inspection Results

### **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles
Unit No. 02 Sutter Bypass	Right	9.10

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	03/16/2015 - 03/16/2015		11/02/2015 - 11/02/2015	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Andy Duffey		Andy Duffey	

#### **Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

## http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Fall 2015

## **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	9.10	11/02/2015 11/02/2015	Bob Duffey

LM Start	2.59	Rating **	С	Issue No.	4		
LM End	2.59	Issue Type +	Ma	Location *	LS		
Earthen Levee				GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Animal Co	ontrol		39.0686	27 °	39.068627	0
пеш				-121.7582	47 °	-121.758247	0
DWR ID DWR_RD1660_02_f _ 2014_4							
Action/Comments							

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

No Photos

LM Start	4.98	Rating **	Α	Issue No.		8	
LM End	4.98	Issue Type +	Ma	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Category				Start		End	
Item	Animal Co	ontrol		39.1010	95 °	39.101095 °	
iteiii				-121.7736	12 °	-121.773612 °	
DWR ID DWR_RD1660_02_f _ 2015_8							
Action/Comments							

Exterminate rodents and backfill and compact or grout burrows. Inspector Comments: The Reclamation District repaired the rodent holes.

### Photo 1 of 1: FA\_2015\_RD1660\_9\_8\_20151118\_00006.jpg



View of the repaired rodent holes.

### Levee Inspection Report By Mile - Fall 2015

### **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	9.10	11/02/2015 11/02/2015	Bob Duffey

LM Start	5.10	Rating **	М	Issue No.		10
LM End	5.10	Issue Type +	En	Location *		LS
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P Field Study		39.1025	12 °	39.102512 °
пеш				-121.7749	60°	-121.774960 °
DWR ID						·

Action/Comments

Inspector Comments: FS\_ID:22705

DS\_ID:22499 EP\_NO: N/A FS\_HLM: 5.115

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pressure relief valve on landside levee slope.Pump platform under construction for upgrade (raising platform)Look for new

upgrade/revision permit.

FIELD\_STRUCT\_DESC: 18-inch steel pipe through the levee, 5.8 feet below crown. Pump in channel. Gate valve on the landward berm. Discharges into 4-foot by 4 foot concrete box on the landward berm. 2inch electric conduit through the levee, 3.0 feet below the crown.

(Permit No. 4215, 1963) FS Date: 10/15/2013

LM Start	5.10	Rating **	М	Issue No.	10 (cont)
LM End	5.10	Issue Type +	En	Location *	LS



LS view: pressure relief valve on levee slope.

Photo 2 of 3: UCIP\_FA\_2015\_2382.jpg



WS view: pump platform under construction. 18" steel pipe and 2" electric conduit under steel platform.

# Levee Inspection Report By Mile - Fall 2015

## **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	9.10	11/02/2015 11/02/2015	Bob Duffey

LM Start	5.10	Rating **	М	Issue No.	Issue No. 10 (con		
LM End	5.10	Issue Type +	En	Location *	on * LS		
Category	Supplemental			GPS Latitude/Longitude			
Category			Start		End		
Item	DWR UCIP Field Study			39.10251	2 °	39.102512 °	
item				-121.77496	° 08	-121.774960 °	
DWR ID							
Action/Comments							

Inspector Comments: FS\_ID:22705

DS\_ID:22499 EP\_NO: N/A

FS\_HLM: 5.115 Repair Type: Non-Urgent Crossing Status: Found



WS view: pump platform under construction.

LM Start	6.01	Rating **	С	Issue No.		5
LM End	6.01	Issue Type +	En Location *			WS
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory			Start		End	
Item	Encroachments			39.1111	45 °	39.111145°
пеш				-121.7875	88 °	-121.787588 °
DWR ID	DWR_RD1	660_02_s _ 201	15_5			·

Action/Comments

Tree or limb

Inspector Comments: The tree was removed from the waterside slope.

No Photos

LM Start	6.26	Rating **	Α	Issue No.		9	
LM End	6.26	Issue Type +	Ma Location *		LS		
Category	Earthen Levee			GPS Latitude/Longitude			
Category				Start		End	
Item	Vegetation			39.11328	37 °	39.113287	0
item				-121.7914	ı2°	-121.791412	0
DWR ID	DWR_RD1	660_02_f _ 201	5_9				

Action/Comments

Control annual grass and weeds on the levee slopes and easements.

Inspector Comments: The District burned and dragged both slopes.



View of no vegetation on both slopes.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2015

## **Reclamation District No. 1660 Tisdale**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	9.10	11/02/2015 11/02/2015	Bob Duffey

LM Start	6.54	Rating **	С	Issue No.	6		
LM End	6.54	Issue Type +	En	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item	Encroachments			39.1155	90 °	39.115590	0
item					77 °	-121.795577	0
DWR ID	R ID DWR_RD1660_02_s _ 2015_6						
Action/Comments							

Tree or limb

Inspector Comments: The tree was removed from the waterside slope.

LM Start	6.78	Rating **	С	Issue No.		7
LM End	6.78	Issue Type +	En	Location *		WS
Catagonia Earthen Levee			GPS Latitude/Longitude			
Category			Start		End	
Item	Encroachments			39.11764	10°	39.117640 °
Item				-121.7992	12 °	-121.799242 °
DWR ID DWR_RD1660_02_s _ 2015_7						
Action/Comments						

Tree or limb

Inspector Comments: The tree was removed from the waterside slope.

No Photos

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement